

Trees in Piedmont Park

Topic: Biology/Trees and Plants

Objectives: Use a dichotomous key to distinguish types of leaves.

Grade Level: 4 - 12

Time: 10 – 15 minutes

Materials: Tree identification book, dichotomous leaf chart, adhesive stars, writing pads, pens or pencils

Location: North Woods, Front Lawn Grove, Oak Hill, Saturn Playground, Noguchi Playscape or any wooded area of Piedmont Park

Background: Piedmont Park is the home of many trees. Look around at the trees nearby. If you look closely you will observe that they are not all the same kind. In this activity you will look at ways different species of trees differ in their leaf shapes and patterns.

Advance Preparation: Prepare a copy of dichotomous leaf chart on poster board. Before students begin the activity, explain the meaning of the terms on the leaf chart.

Procedure:

1. Choose a tree whose leaves you will describe. Look closely at the youngest leaves near the growing tip of a branch rather than the older leaves that may have been damaged by wind or rain or animals.
2. Look at the categories on the dichotomous leaf chart. Follow down the numbered steps to find the best description of your leaf on the chart.
3. Place a star on the chart where your tree belongs.
4. Show the group your tree and describe its leaves.

Vocabulary:

species
conifer
broadleaf
deciduous
evergreen
opposite
alternate
simple
compound
toothed
lobed

Dichotomous Leaf Chart

1	Conifer					Broadleaf												
2	deciduous		evergreen			opposite					alternate							
3			scaly		not scaly	compound			simple			compound			simple			
4			f l a t	n o t l a t	s i n g l e	c l u s t e r	edges smooth	edges not smooth	edges smooth	edges not smooth	toothed	not toothed	edges smooth	edges not smooth				
5								t o o t h e d	l o b e d		t o o t h e d	l o b e d				l o b e d	u n l o b e d	
6																t o o t h e d	u n t o o t h e d	u n t o o t h e d

Questions to think about and discuss:

1. What types of trees have the most stars on the chart? Which have the least? As you look around Piedmont Park, does it seem that the ones with the most stars are the most common in the park as a whole?
2. Look at places on the chart where there are no stars. What types of trees are not found in Piedmont Park?
3. Try to identify your tree from the shape and pattern of the leaves on it. You may need to refer to a tree identification book to do this.
4. How many things can you name that tree leaves are used for? How many things can you name that trees are used for?